

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (original) A purified expressed δ tryptase polypeptide or fragment or analogue thereof.
2. (currently amended) The polypeptide as claimed in claim 1, wherein the polypeptide is the human δ tryptase polypeptide or a variant generated by alternative splicing of the primary RNA transcript encoding the polypeptide.
3. (original) The polypeptide as claimed in claim 2, wherein the polypeptide comprises:
 - (a) the amino acid sequence as set forth in SEQ ID NO:1 or SEQ ID NO:2; or
 - (b) the amino acid sequence as set forth in SEQ ID NO:1 or SEQ ID NO:2 including one or more conservative amino acid substitutions.
- 4 & 5 (canceled)
6. (currently amended) The polypeptide of ~~claim 4 or 5~~ claim 2 wherein the variant polypeptide comprises:
 - (a) the amino acid sequence as set forth in SEQ ID NO:3; or
 - (b) the amino acid sequence as set forth in SEQ ID NO:3 including one or more conservative amino acid substitutions.
- 7 & 8 (canceled)

9. (currently amended) A method of identifying a compound that interacts with the polypeptide or fragment or analogue thereof as claimed in ~~any one of claims 1 to 6~~ claim 1, the method comprising the steps of:

- (a) contacting a candidate compound with the polypeptide or fragment or analogue thereof as claimed ~~any one of claims 1 to 6~~ in claim 1 under conditions suitable to enable interaction of the candidate compound to the polypeptide or fragment or analogue thereof; and
- (b) assaying for activity of the polypeptide or fragment or analogue thereof.

10. (original) The method of claim 9 wherein assaying for activity of the polypeptide or fragment or analogue thereof comprises adding a labelled substrate and measuring a change in the labelled substrate.

11 (canceled)

12. (currently amended) A method of screening for a compound that modulates the activity of the polypeptide or fragment or analogue thereof as claimed in ~~any one of claims 1 to 6~~ claim 1, the method comprising the steps of:

- (a) contacting the polypeptide or fragment or analogue thereof as claimed in ~~any one of claims 1 to 6~~ claim 1 with a candidate compound under conditions suitable to enable interaction of the candidate compound to the polypeptide or fragment or analogue thereof; and
- (b) assaying for activity of the polypeptide or fragment or analogue thereof.

13. (original) The method of claim 12 wherein assaying for activity of the polypeptide or fragment or analogue thereof comprises adding a labelled substrate and measuring a change in the labelled substrate.

14. (currently amended) The method of claim 12 ~~or 13~~ wherein the modulation of activity is an inhibition of activity of the polypeptide or fragment or analogue thereof.

15. (currently amended) A method of diagnosing a disease state, or predisposition to a disease state, in a subject, the method comprising the steps of:

- (a) isolating a biological sample from the subject; and
- (b) assaying for expression of the polypeptide or fragment or analogue thereof as claimed in ~~any one of claims 1 to 6~~ claim 1 in the sample.

16. (original) The method of claim 15 wherein assaying for the expression of the polypeptide or fragment or analogue thereof comprises contacting the biological sample with a compound capable of interacting with the polypeptide such that the interaction can be detected.

17. (original) The method of claim 16 wherein the compound capable of interacting with the polypeptide or fragment or analogue thereof is an anti- δ tryptase antibody.

18. (currently amended) The method of ~~any one of claims 15 to 17~~ claim 15 wherein the disease state is an inflammatory disease.

19. (original) The method of claim 18 wherein the inflammatory disease is a mast cell-associated inflammatory disease.

20. (original) The method of claim 19 wherein the inflammatory disease is selected from the group consisting of: asthma, allergic rhinitis, urticaria, angioedema, eczematous anaphylaxis, dermatitis such as atopic dermatitis, hyperproliferative skin disease, peptic ulcers, inflammatory bowel disorder, ocular and vernal conjunctivitis, rheumatoid arthritis, and inflammatory skin conditions.

21. (original) A method of identifying an agent which is an inhibitor of mast cell-mediated inflammation, the method comprising contacting a cell or cell extract with the agent, determining whether there is a change in the activity of a δ tryptase polypeptide or fragment or analogue thereof, and thereby determining whether the agent is an inhibitor of mast cell-mediated inflammation.

22. (original) The method of claim 21 wherein activity of the polypeptide or fragment or analogue thereof is determined by adding a labelled substrate and measuring a change in the labelled substrate.

23. (original) The method of claim 21 or 22 wherein the agent binds to the δ tryptase polypeptide or fragment or analogue thereof.

24 & 25 (canceled)

26. (currently amended) A method for treating or preventing a disease state in a subject, the method comprising administering to the subject a therapeutically effective amount of a compound identified by the method of ~~any one of claims 9 to 14~~ claim 9 or an agent identified by the method of ~~any one of claims 21 to 25~~ claim 21.

27. (original) The method of claim 26 wherein the disease state is an inflammatory disease.

28. (original) The method of claim 27 wherein the inflammatory disease is a mast cell-associated disease.

29. (original) The method of claim 27 wherein the inflammatory disease is selected from the group consisting of: asthma, allergic rhinitis, urticaria, angioedema, eczematous anaphylaxis, dermatitis such as atopic dermatitis, hyperproliferative skin disease, peptic ulcers, inflammatory bowel disorder, ocular and vernal conjunctivitis, rheumatoid arthritis, and inflammatory skin conditions.

30. (currently amended) A method of inhibiting mast cell-mediated inflammation in a subject, the method comprising administering to the subject a therapeutically effective amount of an agent identified by the method of ~~any one of claims 21 to 25~~ claim 21 or a compound identified by the method of ~~any one of claims 1 to 6~~ claim 9.

31-33 (canceled)